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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/755,951 | 01/04/2001 | Marvin L. Vestal | SYP-060RECN | 4499 |

30407 7590 09/08/2003

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| EXAMINER |
|---|
| SODERQUIST, ARLEN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1743 | |

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/755,951 | VESTAL, MARVIN L. | |
| | Examiner | Art Unit | |
| | Arlen Soderquist | 1743 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *24 July 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *75-98* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *75-98* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5,498,545 or Reissued Patent RE37,485 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

2. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following: this reissue application is a continuation of a reissue application and the instant application only provided copies of the oaths/declarations of the parent application. Since the error cited in the parent application was supposed to be corrected by the parent application, this continuing application is required to correct a different error than the error listed in the parent reissue application.

3. Claims 75-98 are rejected as being based upon a defective reissue Oath/Declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the Oath/Declaration is set forth in the discussion above in this Office action.

4. Applicant's reply, filed July 24, 2003 caused the examiner to reconsider the support for the instant claims with respect to the originally filed specification. After fully considering the issue, examiner has determined that there is support for the instant claims in the specification. The supporting disclosure is found in figures 4-5 and 8-9 and their respective descriptions. As a result, the rejection of claims under 35 USC 112, first paragraph has been withdrawn except as noted below for claim 88.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 88 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim if literally interpreted has both a storage chamber connected to a vacuum lock chamber each of which has a sample support holder therein. This is not described in the original specification or shown in the figures and therefore constitutes new matter.

7. Claim 88 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear if applicant is defining the vacuum lock to have a sample storage chamber with the sample support storage holder therein (equivalent to instant claim 90) or defining two separate chambers each having a sample support storage holder therein which would be totally unsupported by the description in the originally filed specification as outlined above. For this reason, claim 88 is being treated as equivalent to claim 90 in the action which follows.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 75-81 and 84-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beavis (US 5,288,644) in view of Wilhelmi (*Safeguards Tech., Proc. Symp.* or KFK-2319, EUR05504), Weinberger and Duffin. In the figures and associated discussion Beavis teaches a

mass spectrometry instrument (30) and sample preparation device for determining the sequences of DNA molecules. Column 3, lines 19-23 teach that an objective of the device is to automate the analysis process. The sample preparation device includes an autosampler (10), matrix container (12) and sample containers (14) under the control of a computer (22). This instrument is used to prepare and analyze a plurality of samples by matrix-assisted desorption/ionization. In preparing a sample the autosampler mixes a sample with the matrix material and spots it (18) at a specific, known location on a disk (20) or other media having a planar surface relative to a reference mark (24) on the disk (column 4, line 53 to column 5 line 24). The known location of each spot is loaded into the computer (22). After spotting, the samples (18) are dried and inserted into the mass spectrometer through a vacuum lock (column 4, lines 63-67) which would have some form of door to allow the insertion of the sample into the lock and subsequently into the ion source of the spectrometer. Also inherent in a vacuum lock would be the removal of ambient atmosphere in the lock during the pump down phase to prevent exposure of the sampling region to the ambient atmosphere. Column 5 lines 20 - 28 teach the positional adjustment of the disk (20) within the spectrometer to allow the disk to be rotated so that each of the 120 samples on the disk can be measured. Column 5 lines 30 - 34 teach that the particular disk geometry is only exemplary and other geometries employing linear translation of the planar surface are also contemplated. Column 5 lines 35-45 teach maintaining the disk at a potential during ion formation with a laser (32). Column 6, lines 26-33 teach the attenuation of the laser output. Column 4, lines 9-30 of the instant specification teaches various ways of providing the samples at fixed locations including just knowing the coordinates of the location which Beavis clearly teaches. Beavis fails to teach maintaining a second sample containing disk under vacuum conditions while the first is being struck with laser pulses, a curing chamber, identification means in the support, one or more samples in the vacuum lock during processing of one sample in the spectrometer, or magnetic means on the sample tray and transports for coupling during sample tray movement.

In the paper Wilhelmi discusses an automatic analytical laboratory for mass-spectrometric isotopic-dilution analysis of uranium and plutonium in fuel solutions. The individual basic processes, i.e., sampling, spiking, and chemical processing of the samples, mass-spectrometric measurement and calculation of the analytical data, are automated

independently. Experience obtained over 4 years of manual processing and measurement of several hundreds of samples caused the conversion to automation. The different process steps required for sampling, spiking, and chemical processing of the samples are implemented by components which are combined by a unit-construction system. For the mass-spectrometric measurements commercial equipment was automated. The sample throughput of this equipment is to be increased to 48 measurements per day by a high-vacuum lock system for preheating the samples. Further commercial equipment is used to calculate the results of the analyses whose program is being developed. The concept and designing of the facility and the present state of development are reported. Relevant to the instant claims are figure 3 and its associated discussion. In the figure three separate lock chambers are shown. In the left chamber sample degassing occurs. The left chamber is connected to the middle chamber such that during the degassing the two chambers are isolated from each other. After degassing the two chambers are brought into fluid communication and the sample cassette with its plurality of samples is automatically transferred into the middle chamber. This chamber is directly connected to the ion source and figure 3 appears to show that there is fluid communication during the insertion of a sample into the ion source. After the analysis is finished the sample is returned to the cassette and the next sample is analyzed. When the samples in a cassette have been analyzed the cassette is transferred to the right chamber in a manner similar to the first transfer. The first section of page 171 discusses the advantages of the automation including saving time and improving reproducibility.

In the report Wilhelmi (see the translation) describes a completely automated mass spectrometer in fissile material control. The demand for higher accuracy and a shorter delay in the analysis together with better data security needed in safeguards, lead to the automation of a mass spectrometer. Starting with the continuous feed of samples via a high vacuum lock and including the subsequent heating, focusing and scanning of the samples as well as the final evaluation of the data (taking -spectrometry and the weights required for the isotropic dilution technique into account), the mass spectrometric procedure was completely automated. A serial CH-5 instrument of VARIAN MAT was modified to be operated by a VARIAN 620/I computer. A newly developed 3-chamber high vacuum lock was attached to this system and the final evaluation was made with an IBM 370. This was described in sections 2.3, 2.31, 4, 4.14.2, 5, 5.1

and figures 8-13. The system was used for the isotope analysis of U, Pu and Nd. Major breakdowns of the hardware did not occur, however, the computer programs had to be steadily improved according to the changing characteristics of the samples. Compared to manual operation, the automated technique is superior for the reasons given in section 5.4.

In the figures and associated discussion Weinberger teaches a laser desorption mass spectrometer and sample preparation device. Of particular interest to the instant application are figures 6, 6a and 14 teaching a drying chamber (320) to assist in drying the samples and means for storing and inserting multiple sample containing probes in a vacuum chamber connected to a vacuum chamber for the mass spectrometer ion source. In the vacuum chamber (28) a sample cassette (152) containing a plurality of sample probes (30,154) which has a magnetic or mechanical coupler (162) that interacts with a similar coupler (160) on the transporter device (159).

In the paper Duffin teaches an automated sample transport system for chromatography/secondary ion mass spectrometry. The design of a new sample cell for a large-scale secondary ion mass spectrometer is described. Unique to this new source chamber is the incorporation of large piezoelectric translator stages capable of 20 cm × 20 cm movement with high resolution. In addition, the source chamber is designed so that interchangeable detector assemblies can be fitted to the chamber. The paragraph bridging pages 1072-1073 discusses previous sample manipulation stages using mechanical linkages from external drives or vacuum compatible stepper motors and how the piezoelectric translators do not have the disadvantages of heat control or loss of resolution due to gears. This translation stage allows controlled movement of the sample supports with a position reproducibility of 1 .

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a vacuum lock connection as taught by Wilhelmi into the Beavis device and method because as shown by Wilhelmi it would have allowed the sample preparation and analysis to occur under conditions that would have provided further advantages such as time and throughput related to automation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sample cassette as taught by either Wilhelmi or Weinberger and transporter mechanism of Weinberger into the Beavis device because one of ordinary skill in the art would have recognized that having multiple sample trays

in the sample chamber would allow the instrument to operate for extended periods of time without operator interaction and would facilitate movement of the sample trays into and out of the mass spectrometer as shown by both Weinberger and Wilhelmi. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a drying chamber as taught by Weinberger into the Beavis device because one of skill in the art would have recognized that the drying chamber would increase the preparation speed by reducing the time for the samples to dry. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the movement mechanism of Duffin into the Beavis device because of it ability to translate a sample support to position the support for vaporizing sample from multiple locations and its advantage over external drives and vacuum compatible drives as taught by Duffin.

10. Claim 82 is rejected under 35 U.S.C. § 103 as being unpatentable over Beavis in view of Wilhelmi, Weinberger and Duffin as applied to claim 81 above, and further in view of Ledford. Beavis does not teach indicia at each sample location.

In the patent Ledford teaches apparatus and method for injecting samples into a mass spectrometer. Column 2, line 56 to column 3, line 31 teach that the samples are deposited on a tape or rotatable disk which may be inserted into the ionization chamber through a vacuum lock mechanism. Also taught is mixing the sample with an easily vaporizable matrix material to enhance volatilization of nonvolatile or thermolabile samples (also see column 11, lines 5-21). Optical indicia are provides to give sample identification and sample position information (column 10, lines 50-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include indicia as taught by Ledford at the sample positions of Beavis because of the ability to provide indexing and sample information as taught by Ledford.

11. Claim 83 is rejected under 35 U.S.C. § 103 as being unpatentable over Beavis in view of Wilhelmi, Weinberger and Duffin as applied to claim 75 above, and further in view of Bakker. Beavis does not teach a door member between the ion source chamber and the vacuum lock.

In the paper Bakker presents a direct-insertion sample-handling system for mass spectrometers. The direct-insertion lock was brazed to the side of the vacuum chamber of the mass spectrometer opposite the source. The stainless steel probe does not need an exceptionally

high surface finish; machining to a fine finish followed by polishing with a linen mop is sufficient. The insertion lock is isolated from the source by a 1 inch quarter-swing butterfly valve (door). The whole assembly is made of stainless steel. Sealing is done with viton O-rings. The seals are so effective that differential pumping is no longer used. Sample introduction takes <1 minute, and at all times there is a positive control over the probe position. None of the source supplies had to be switched off during sample introduction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the door (swinging valve) of Bakker between the vacuum lock and the ion source chamber as taught by Bakker in the device of Beavis because of the ability to rapidly introduce samples into the ion source chamber under vacuum without switching off the ion source as taught by Bakker.

12. Claims 90, 96 and 98 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 88, 95 and 97 respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 75-98 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 75-161 of U.S. Patent No. RE37,485. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are of a scope that would encompass the patented claims.

15. Applicant's arguments and the declaration of Dr. Brown filed July 24, 2003 have been fully considered but they are not persuasive. First with respect to the new matter rejection, examiner has determined that except for claim 88, the claimed subject matter is supported by the specification as filed. This support is found in figures 4-5 and 8-9 and their respective descriptions rather than in figures 6-7 and their associated description. However, a literal reading of claim 88 leads to a structure having a storage chamber connected to a vacuum lock chamber with each chamber having a sample support holder therein. This is not described or depicted in the specification as originally filed. This clearly goes beyond what the description would have reasonably conveyed to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. As a result, the rejection under 35 USC 112 first paragraph has been withdrawn from all claims except claim 88. If in the alternative, applicant intended to further define the vacuum lock chamber to include a sample storage section in which the sample support holder was located, as is clearly supported by the specification, then the claim is equivalent to instant claim 90. The objection to claims 96 and 98 being duplicate claims comes from a realization that there must be some structure such as an opening which could reasonably be called an output port between the ion source chamber and the vacuum lock chamber for the functional language of claims 95 and 97 to occur. Thus the claims are of the same scope and duplicative. If applicant intended for the output port to include door 76, then the feature should be positively recited.

Relative to the art rejection, applicant is correct that Beavis does not provide specific teachings about the mechanism for inserting the sample disk through the vacuum lock into the ion source of the mass spectrometer. However, the figures and specification do provide some detail that would direct one of skill in the art to the secondary references. First applicant is directed to figure 2 of the Beavis reference. It is clear that the sample disk is inside of the ion source and that the rode to which it is attached is also at least partly within the ion source. Additionally column 5, lines 19-24 of Beavis teach that the sample disk can be rotated within the ion source region of the mass spectrometer by a stepper motor that is different from the one used when samples were deposited on the disk. Thus there has to be something that can be classified as a sample receiving stage to allow for mounting and removal of the disk on the stepper motor. The instant claims do not require any more structure than this for the sample receiving stage.

This also clearly teaches that any mechanism used in the method of Beavis would need to both associate and disassociate the sample disk from the receiving stage of the stepper motor. Figure 2 also shows the disk inside of the mass spectrometer which means that the sample receiving stage is in the ions source of the mass spectrometer. It is also important to note that it is only the sample disk that is loaded rather than the complete disk stepper motor assembly. Although this does not teach that the sample disk is loaded onto a receiving stage in the ion source chamber, it clearly does not teach away from that occurring or being the preferred method of loading the sample disk. Applicant has not provided any probative evidence to support the position that the disk is attached to the stepper motor outside of the mass spectrometer while figure 2 clearly shows the stepper motor having components that extent though the mass spectrometer wall and the disk being of a size that exceeds the diameter of the rod to which it attaches. This would either require the vacuum lock to de of a design that would allow the sample disk to enter the ion source chamber and provide a seal on the smaller stepper motor rod during the analysis or require that the association and disassociation occur in the source chamber. Since Beavis fails to teach specifically how to get the disk inside of the mass spectrometer, that would have been left up to one of ordinary skill in the art. However in the paragraph bridging columns 4-5, Beavis is clearly concerned with the time of sample analysis as well as the loading and pump down time. In lines 5-10 on column 5 Beavis distinguishes the insertion method from the manual method disclosed in a then copending patent application (see column 4, lines 4-9 of US Patent 5,045,694). It is clear that the reference to loading and pump down found in the sentence bridging the two columns is talking about loading the sample into the mass spectrometer since the first sentence of the paragraph sets the time as after the samples are deposited on the disk. From this one would have gathered that the insertion of the sample disk was not intended to be manual. In the last sentence of that paragraph Beavis touches on automation and the ability of it to reduce the time and effort of a dedicated, trained operator. In the last full paragraph of column 4, Beavis describes an automated system for sample preparation and sample loading on to the disk. Thus Beavis would direct one of skill in the art to look for automated methods of handling the sample disk during at least preparation and analysis. In this way one of ordinary skill in the art would have been directed by the teachings of Beavis to look for automated method and apparatus to handle the sample preparation and analysis in a mass spectrometric assay. Thus one

of skill in the art would have been directed by the teachings of Beavis to the Wilhelmi, Weinberger and Duffin references. In the Wilhelmi references one of skill in the art would have clearly seen the benefits of a combined, automated preparation and mass spectrometer insertion system and incorporated the teaching for those reasons. In Weinberger one of ordinary skill in the art would have seen similar things in addition to a magnetic or mechanical coupling means for the sample presentation surface. In a similar manner one of ordinary skill in the art would have recognized the advantages of the Weinberger teachings and incorporated appropriate teachings into the Beavis device. The Duffin reference clearly shows a sample receiving surface in an ion source chamber capable of automated x and y movement in which the sample is associated and disassociated with the sample receiving surface.

Relative to the vacuum lock and the pump down that occurs with loading of a sample into a mass spectrometer, applicant is directed to the applied Bakker reference which clearly shows that the pump down occurs between the time the sample enters the vacuum lock and the time that the ion source chamber is opened to the vacuum lock chamber for the sample being inserted into the ion source chamber. From this it is clear that the Beavis reference discussion the pump down cannot be used to show that the attachment and detachment of the sample disk to the stepper motor occur either inside or outside of the ion source chamber.

Relative to the combination of references and the amount of experimentation needed to combine them applicant is directed to *In re* Sneed 218 USPQ 385, 389 (Fed. Cir. 1983) and *In re* Keller 208 USPQ 871, 880 (CCPA 1981) showing that a secondary reference does not need to be physically combinable with the primary reference to render the invention under review obvious. The Courts view one of ordinary skill in the art as a person having skill rather than one without skill (See *In re Sovish*, 226 USPQ 771 (Fed. Cir. 1985). As a result, one would need to define the level of skill in the art and provide probative evidence to show that the level of skill required to combine the teachings of the references goes beyond the level of skill of one of ordinary skill in the art. Furthermore the claims lack specific structure for the sample support transfer mechanism and case law relative to automation of a manual activity is clearly relevant to the instant claims. In particular see *In re Venner*, 120 USPQ 192 (CCPA 1958) (to provide a mechanical or automatic means to replace manual activity which accomplishes the same result is within the skill of a routineer in the art). If the opinions expressed are not based on probative

evidence that is also presented, the opinions carry little patentable moment. Additionally in doing this one should be cognizant of the scope of the claims relative to the specific disclosure of the specification and figures. If one is basing their opinions on the specific disclosure of the specification, rather than the scope of the claims then the opinions are not commensurate in scope with the claims. In this situation the opinions have little probative value.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art relates to vacuum buffer or lock chambers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arlen Soderquist whose telephone number is (703) 308-3989. The examiner's schedule is variable between the hours of about 5:30 AM to about 5:00 PM on Monday through Thursday and alternate Fridays.

For communication by fax to the organization where this application or proceeding is assigned, (703) 305-7719 may be used for official, unofficial or draft papers. When using this number a call to alert the examiner would be appreciated. Numbers for faxing official papers are 703-872-9310 (before finals), 703-872-9311 (after-final), 703-305-7718, 703-305-5408 and 703-305-5433. The above fax numbers will generally allow the papers to be forwarded to the examiner in a timely manner.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Arlen Soderquist
September 2, 2003

ARLEN SODERQUIST
PRIMARY EXAMINER